Ecoloft Jababeka Golf

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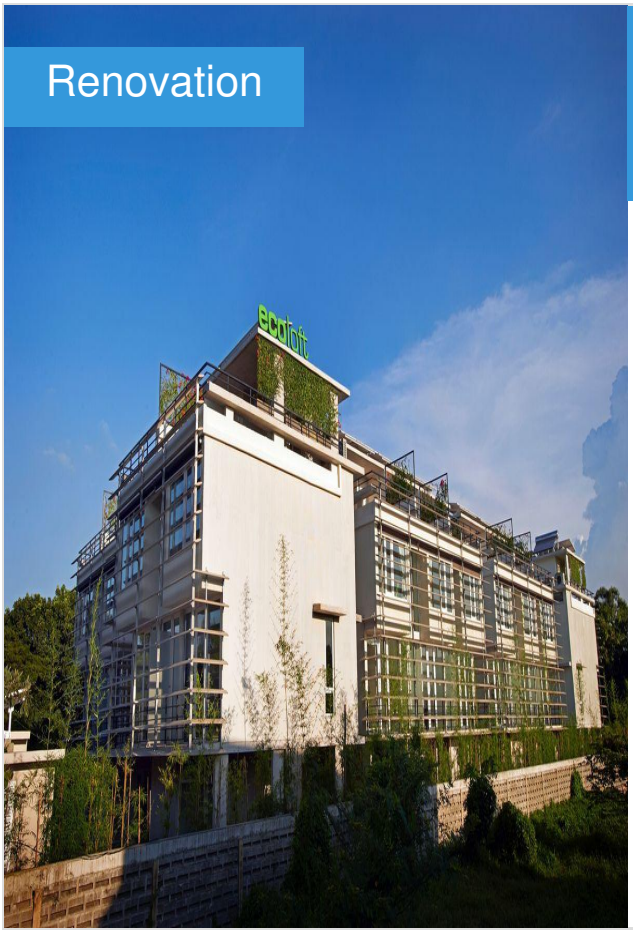

Primary energy need :
kWhpe/m².year
(Calculation method :)

ENERGY CONSUMPTION

Economical building *Building*

- *< 50* **A**
- *51 à 90* **B**
- *91 à 150* **C**
- *151 à 230* **D**
- *231 à 330* **E**
- *331 à 450* **F**
- *> 450* **G**

Energy-intensive building

Building Type : Hotel, boarding house
Construction Year : 2017
Delivery year : 2017
Address 1 - street : Jl. Taman Golf Utama I No 5 Jababeka 17530 BEKASI, Indonesia
Climate zone : [Af] Tropical Wet. No dry season.

Net Floor Area : 2 432 m²
Number of Bedroom : 19 Bedroom

Certifications :

Proposed by :

General information

The Ecoloft serviced apartments are situated in Cikarang (Bekasi), which is becoming the new industrial hub in the greater Jakarta area. The townhouses are in the heart of the Jababaka Golf Course, surrounded by trees, lakes and walking paths, offering a great recreational setting while only being minutes away from the bustling business center. The apartments are resource-efficient and environmentally friendly, from layout and design straight through to construction, operation and maintenance. Residents are estimated to benefit from energy savings of more than 80 percent primarily due to the installation of solar technologies.

Ecoloft Jababeka Cikarang, which has been developed by Asia Green Real Estate, has received final EDGE certification from the Green Building Council Indonesia.

See more details about this project

http://ecoloft.co.id/index.php/en

Photo credit

Photos courtesy of Ecoloft

Stakeholders

Construction Manager

Name : GPDI (green property development indonesia)
http://www.ecotool.asia/gpdi/

Stakeholders

Function : Investor

Asia Green Real Estate

https://www.asiagreen.com/en/
Asia Green Real Estate is a FINMA-accredited asset manager, investing in sustainable real estate in Asian metropolises

Energy

Energy consumption

Breakdown for energy consumption : 6 kWhfe/m2.year: Cooling energy
12 kWhfe/m2.year :Home appliances
5 kWhfe/m2.year : lighting
1 kWhfe/m2.year : common amenities

Initial consumption : 132,00 kWhpe/m^2.year

Envelope performance

More information :
Roof U Value: 2.2
Wall U Value: 2.1
Glass U Value: 5.8

Real final energy consumption

Final Energy : 24,08 kWhfe/m^2.year

Renewables & systems

Systems

Heating system :

- No heating system

Hot water system :

- Solar Thermal

Cooling system :

- VRV Syst. (Variable refrigerant Volume)

Ventilation system :

- Natural ventilation

Renewable systems :

- Solar photovoltaic

Renewable energy production : 25,00 %

Water heater – Solar water heater is provided – Intisolar (IS 20 CE) or Vulcan, Rheem. vaccum tube type

Products

Product

Reduced Window to Wall Ratio - WWR of 16.8%
External Shading Devices - Annual Average Shading Factor (AASF) of 0.51
Insulation of Roof - U Value of 0.45
Insulation of External Walls - U Value of 0.19
Air Conditioning System - COP of 3.5
Energy-Saving Light Bulbs - Internal Spaces
Energy-Saving Light Bulbs - Common Areas and Outdoor Areas
Solar Hot Water Collectors - 50% of Hot Water Demand
Solar Photovoltaics - 25% of Total Energy Demand

Product category : Second œuvre / Plomberie, sanitaire

Low-Flow Showerheads - 8 lt./min
Low-Flow Faucets for Kitchen Sinks (10 lt./min) and Washbasins (6 lt/min)
Dual Flush for Water Closets - 4 lt./first flush and 3 lt./second flush

Product category : Second œuvre / Cloisons, isolation

External Walls: Cellular Light Weight Concrete Blocks
Internal Walls: Cellular Light Weight Concrete Blocks
Flooring: Parquet/Wood Block Finishes
Window Frames: UPVC
Wall Insulation/Roof Insulation : Polystyrene

Costs

Energy bill

Forecasted energy bill/year : 4 965,00 €

Real energy cost/m2 : 2.04

Real energy cost/Bedroom : 261.32

Health and comfort

Water management

Consumption from water network : 1 757,88 m^3

Water Consumption/m2 : 0.72

Water Consumption/Bedroom : 92.52

30 m3/unit/year: shower

16 m3/unit/year: kitchen

11 m3/unit/year: water faucets

11m3/unit/year: water closets

24 m3/unit/year: washing and cleaning

Water efficiency measures: 30.79%

The Ecoloft Jababeka Golf Apartments not only offer clean and safe water - the tap water is actually drinking quality, tested and certified by a governmental laboratory. By using reverse osmosis technology the water is pumped up from 150 m depth, filling up the water tank of each unit.

Comfort

Health & comfort : Green Building from A to Z

Ecoloft is an eco-efficient boutique residence and a green building to the core, focusing on the 3 corner stones **comfort, efficiency and health.**

- Efficient use of energy, water and other resources, while reducing waste (and costs) at the same time
- Protecting occupants health and improving the quality of life
- Utilization of natural materials that are locally sourced

Bamboo meets concrete The Ecoloft Jababeka Golf Apartments are supposed to be a little oasis, so that you can feel truly at home when you are at home. The townhouses offer an

elaborate construction to meet the green building requirements. All walls and roofs are insulated, and the units feature double glass airtight windows. Natural materials as well as ample green space and relaxing surroundings with various trees, flours and grassland further contribute to fresh and clean air.

Solar power production The units are equipped with solar panels that produce renewable energy during the time of natural sunlight. On top of each townhouse is a hot water tank (400 l) installed, which is filled and heated by solar water collectors. 50% of the electricity is produced by solar energy, using the photovoltaics method which converts solar energy into direct current electricity. If there is too much power available that cannot be stored, a high-tech system calculates how many A/C units in each townhouse can be turned on in order to have constantly a pleasant temperature in all rooms, free of charge. This results in 30% power savings, not to mention the environmental benefits.

High comfort through efficient cooling The lofts feature a well-though-out room concept, with recirculating air between houses as well as inside all buildings and rooms. The interior air is conditioned and moved by high-efficient AC's and Heiku fans which gives you the choice of natural ventilation or enforced air conditioning. Permanent horizonal fins and variable vertical rollerblinds with built-in sensors guarantee shading on each side of the building during any time of the day. When the sun goes down, LED lighting offers cozy illumination. Everything you need to feel comfortable at any time inside your home.

Carbon

GHG emissions

GHG in use : 18,11 $KgCO_2/m^2/year$

GHG before use : 99,60 $KgCO_2 /m^2$

, ie xx in use years : 5.5

Contest

Reasons for participating in the competition(s)

82% Energy Savings
Reduced window to wall ratio, external shading devices, insulation of roof and external walls, air conditioning system with high COP, energy-saving lighting system for internal spaces, common areas and external spaces, solar hot water collectors, and solar photovoltaics.

31% Water Savings
Low-flow faucets in kitchens and bathrooms, and dual-flush water closets.

47% Less Embodied Energy in MaterialsCellular light weight concrete blocks for internal and external walls, parquet and wood block finishes and UPVC window frames.

Building candidate in the category

Energy & Hot Climates

Low Carbon

Health & Comfort

Users' Choice

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